Qeios

Peer Review

Review of: "Share a Tiny Space of Your Freezer to Preserve Seed Diversity"

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While this is an interesting concept, I am not convinced that this is necessary or the best way to safeguard seed for the future. While the success of the proposed system depends upon the participation of users, the users referred to in this paper are not defined. The first mention of users refers to those who have received seed from genebanks. It is assumed that users refers to researchers, breeders, and perhaps educators. If this is the case, there are some limitations in capacity relative to supporting effective seed storage and also quality control measures. There are many users who would have access to the facilities and expertise needed for seed-banking; however, if they had the capacity to seedbank, they would have a seedbank. As a user, I rely on seedbanks to maintain robust records, ensure effective storage that provides quality seed, test seed viability on a regular cycle, and in some cases regenerate fresh supplies of seed.

Many of us with expertise and storage do not have the staff or time capacity to meet the standards necessary for effectively storing seed for an extended period of time in a manner that qualifies as seed-banking or gene-banking. Even botanic gardens with index semina can often miss the mark when it comes to seed storage, resulting in shipments of desiccated and nonviable seed. Additionally, the record keeping that is necessary to meet seedbank standards tends to be a challenge for many folks and even institutions. So, while seed stored in this manner could be useful for gardeners or farmers, I am skeptical that such seeds would meet the standards for conservation or research purposes.

Declarations

Potential competing interests: No potential competing interests to declare.